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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/727,349  | 12/03/2003  | Wilson Greatbatch    | 1599-3b             | 5459             |
| 44190   | 7590        | 03/02/2006           | EXAMINER            |                  |
| WALTER W. DUFT<br>LAW OFFICES OF WALTER W. DUFT<br>8616 MAIN ST<br>SUITE 2<br>WILLIAMSVILLE, NY 14221 |             |                      | BOCKELMAN, MARK     |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 3766                |                  |

DATE MAILED: 03/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/727,349 | <b>Applicant(s)</b><br>GREATBATCH ET AL. |  |
|                              | <b>Examiner</b><br>Mark W. Bockelman | <b>Art Unit</b><br>3766                  |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3-15-04, 2-22-05</u> | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 101***

Claims 1-30 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. Applicant's claimed invention of optimizing energy output would require a charge control circuit with no energy losses and with zero (minimum) capacity fade and zero increase in internal battery resistance. Such a system violates the laws of thermodynamics and electromagnetic theory.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-30 are rejected under 35 U.S.C. 112, first paragraph, because the best mode contemplated by the inventor has not been disclosed. Evidence of concealment of the best mode is based upon applicant using the term "optimized" and "minimizing" in his claims would indicate that the optimal arrangement of batteries and electrical circuit components, including circuit component values etc. are disclosed. No such optimal arrangement is mention in the specification and in fact several alternative choices of batteries are provided. Optimizing means having a peak value while minimizing means an absolute minimum value. Applicant's specification states that a change of .2V *should*

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be sufficient. This seems to indicate that the selected value may *lessen* the effects but provides no absolute guidance to achieving the absolute peak performance and absolute minimum fade i.e. zero fade. and zero increase in internal resistance.

Claims 1-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has not provided an adequate description for the optimal arrangement of components to achieve any optimal results as noted above. It is also unclear exactly what aspect of the circuit "output" applicant is trying to optimize (e.g. charging time, discharging time, discharging voltage etc.) As in all cases of engineering, there are tradeoffs in optimizing particular desired parameters which generally result in other parameters being less than optimal. The applicant has also not defined the parameters surrounding the optimization and not shown that more complex and larger circuits than his specific embodiments could not provide a more optimal arrangement that would not permit applicant to claim his invention in the manner in which it is claimed.

In addition, applicant's specification seems to be at odds with itself. While applicant suggests that limiting the maximum and minimum state of charge of the battery has beneficial results in terms of capacity fade and internal battery resistance versus maximal charging and maximal discharging this limiting or shrinking of the voltage range would seem to increase the number of charge/discharge cycles which

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from applicant's graphs 3a and 3b, would tend to more rapidly reach higher capacity fade and internal resistance.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark W. Bockelman whose telephone number is (571) 272-4941. The examiner can normally be reached on Monday - Friday 10:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on (571) 272 -6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MWB

February 20, 2006



MARK BOCKELMAN  
PRIMARY EXAMINER